

## Diastematomyelia on MRI - Case Report

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**Received:** February 24, 2020; **Published:** March 21, 2020

### Abstract

Diastematomyelia is rare congenital spinal dysraphism disorder characterised by longitudinal split of the spinal cord. In Type I there is duplication of dural sac into two by the osseous or fibrous spur and in Type II there is single dural sac containing two hemicords. In this case reports we see two patients on MRI with type I diastematomyelia with osseous and fibrous spur.

**Keywords:** *Diastematomyelia; Congenital Spinal Dysraphism Disorder*

### Introduction

Diastematomyelia is rare congenital spinal dysraphism disorder characterised by longitudinal split of the spinal cord.

### Case Report

We present a case report comprising one of patient 8 year old female presented with lump lower back in the midline and leg weakness MR images showed midline osseous spur at T12 and L1 level splitting the dural sac into two, there was also presence of altered curvature of LS spine with block vertebrae at L1 and L2 level. There was presence of tethering of cord seen as the cord is ending at L3 level. There was also presence of spina bifida at these levels with herniating meninges.

In other case A 12 year old male child presented with leg weakness MR images showed midline fibrous spur at T12 and L1 level splitting the dural sac into two, there is presence of tethering of cord seen as the cord is ending at L3 level. There is also presence of spina bifida occulta at these levels.

The diagnosis in both cases was of Diastematomyelia type I was made by the classic MRI appearance first one having osseous spur and second one having fibrous spur.

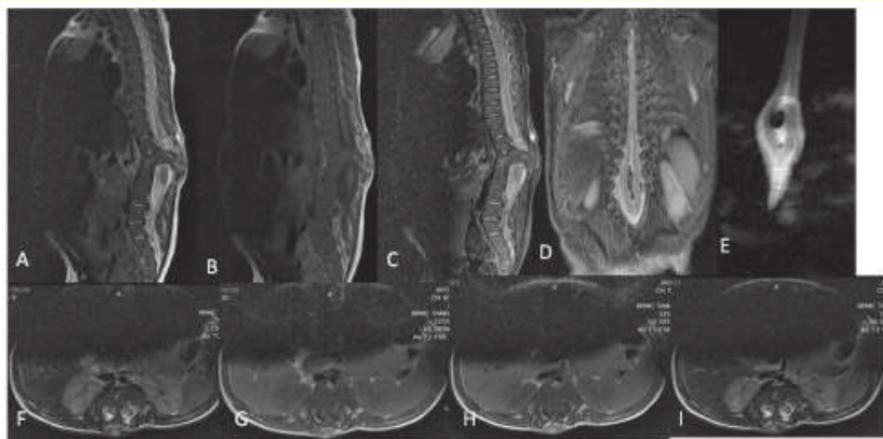


Figure 1

A 8 year old female presented with lump lower back in the midline and leg weakness MR images shows midline osseous spur at T12 and L1 level splitting the dural sac into two, there is also presence of altered curvature of LS spine with block vertebrae at L1 and L2 level. There is presence of tethering of cord seen as the cord is ending at L3 level. There is also presence of spina bifida at these levels with herniating meninges.

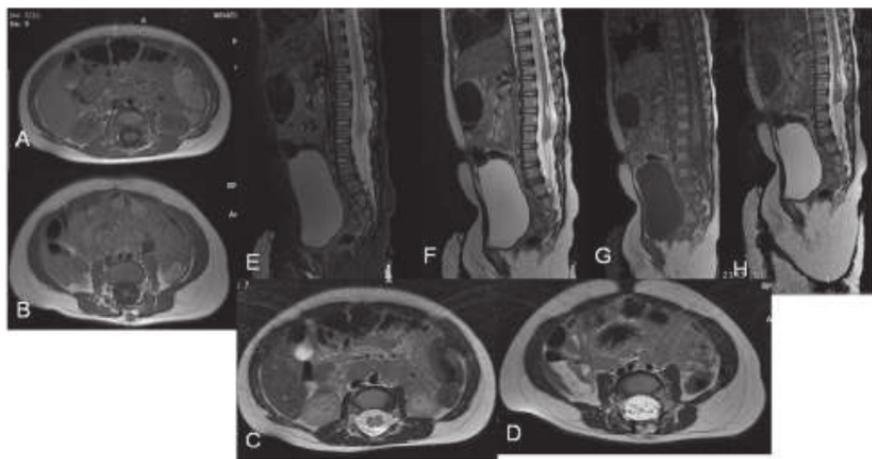


Figure 2

A 12 year old male child presented with leg weakness MR images axial (A, B-T1W, C, DT2W) and sagittal E-STIR, F, H-T2W, G-T1W) shows midline fibrous spur at T12 and L1 level splitting the dural sac into two, there is presence of tethering of cord seen as the cord is ending at L3 level. There is also presence of spina bifida occulta at these levels. The diagnosis of Diastematomyelia type I was made by the classic MRI appearance.

### Discussion

Diastematomyelia is rare congenital spinal dysraphism disorder characterised by longitudinal split of the spinal cord. In Type I there is duplication of dural sac into two by the osseous or fibrous spur and in Type II there is single dural sac containing two hemicords [1-6].

### Conclusion

Patient is asymptomatic but may present with symptoms of pain, leg weakness, incontinence etc. particularly in case of Type I Diastematomyelia.

Key imaging diagnostic clues:

1. Plain radiographs shows spina bifida, scoliosis and increased inter pedicular distance.
2. CT and MRI shows clearly the midline spur with associated anomalies like meningocele, dermoid cyst, neuroenteric, hemivertebrae, butterfly vertebrae cyst etc.
3. MRI is the imaging of choice to demonstrate the presence of associated Hydromyelia.

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**Volume 11 Issue 4 April 2020**

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